CLAIMS

Sub A' 1. A method of controlling data traffic at a node on a network, said node having at least one output coupled to at least one link on the network, said method comprising:

defining a bandwidth value for the at least one link related to a maximum amount of data to be transferred on the link;

providing a plurality of queues for storing data to be transferred on the at least one link;

assigning a queue value to each of the plurality of queues, each of said queue values being related to a preference for transferring data from its assigned queue onto the link; and

assigning a data limit value to each of the plurality of queues, an amount of data being transferred onto the link from each queue being limited by the data limit value assigned to the queue, and each of said data limit values being derived from the bandwidth value for the at least one link.

2. The method of claim 1, wherein the queue values are priority values, each priority value defining a priority for transferring data stored in the associated queue onto the link.

3. The method of claim 2, wherein each of the data limit values assigned to the queues is related to a percentage of the bandwidth value.

4. The method of claim 1, wherein each of the queue values defines a weight for its assigned queue, the plurality of queues transferring data onto the link according to the weights of the plurality of queues.

5. The method of claim 4, wherein each of the data limit values assigned to the queues

is related to a percentage of the bandwidth value.

6. The method of claim 1, wherein each of the data limit values assigned to the queues is related to a percentage of the bandwidth value.

7. An apparatus for controlling data traffic at a node on a network, comprising:

an output interface coupled to at least one link on the network for transferring data toward the at least one link, the at least one link being associated with a bandwidth value related to a maximum amount of data to be transferred on the link;

a plurality of queues for storing data to be transferred via the output interface; and

at least one processor for (i) assigning a queue value to each of the plurality of queues, each of said queue values being related to a preference for transferring data from its assigned queue onto the link, and (ii) assigning a data limit value to each of the plurality of queues such that an amount of data being transferred onto the link from each queue is limited by the data limit value assigned to the queue, each of said data limit values being derived from the bandwidth value for the at least one link.

8. The apparatus of claim 7, wherein the queue values assigned by the at least one processor are priority values, each priority value defining a priority for transferring data stored in the associated queue onto the link.

9. The apparatus of claim 8, wherein each of the data limit values assigned by the at least one processor is related to a percentage of the bandwidth value.

10. The apparatus of claim 7, wherein:

each of the queue values assigned by the at least one processor defines a

weight for its assigned queue; and

the plurality of queues transfer data onto the link according to the weights of the plurality of queues.

11. The apparatus of claim 10, wherein each of the data limit values assigned by the at least one processor is related to a percentage of the bandwidth value.

12. The apparatus of claim 7, wherein each of the data limit values assigned by the at least one processor is related to a percentage of the bandwidth value.